FEASIBILITY STUDY

Pittsboro New Connector on New Location From NC 902 to US 15-501/NC 87 Chatham County R-3114

Prepared by Program Development Branch Division of Highways N. C. Department of Transportation

Engineering Co-Op

W.J. Watson, P.E.

Highway Planning Engineer

Head of Feasibility Studies

Pittsboro
New Connector on New Location
From NC 902 to US 15-501/NC 87
Chatham County
R-3114

I. GENERAL DESCRIPTION

This feasibility study describes a proposed new connector between NC 902 and US 15-501/NC 87 in Pittsboro, Chatham County. The project location is shown on Figure 1. The studied new connector is a two-lane, two-way, rural shoulder section with a pavement width of 24 feet (7.3 m). The total project length is approximately 0.74 miles (1.2 km), and the proposed right-of-way width is 100 feet (30.5 m). It is estimated there will be two residences and one church relocated due to this project. The total cost including construction and right-of-way is estimated to be \$ 1,400,000.

This study is the initial step in the planning and design process for this project and is not the product of exhaustive environmental or design investigations. The purpose of this study is to describe the proposed project including costs, and identify potential problems that may require consideration in the planning and design phases.

II. NEED FOR PROJECT

The purpose of this project is to provide a route for NC 87 through Pittsboro that avoids the traffic circle and related congestion at the Chatham County Courthouse. Further, this project will improve traffic circulation in southern Pittsboro. This facility is included on the Pittsboro Thoroughfare Plan as a major thoroughfare and the project has strong local support.

The 1993 Average Daily Traffic (ADT) on this connector is estimated to be 3700 vehicles per day (vpd) and the ADT in the design year (2013) is estimated to be 7300 vpd. Based on these traffic projections, this connector will operate at Level of Service (LOS) C in the design year.

Land within the proposed corridor is mostly undeveloped, or rural residential and farm land. At the western project terminal there is a church that will require relocation. Near the eastern project terminal there is single family residential development and some commercial development. Two of these residences will require relocation.

A thorough determination of this location is beyond the scope of this study.

The church building, mentioned above, may not need to be taken if the intersection point on NC 902 can be shifted south to a point opposite SR 2160. This shift would also preclude the need, as mentioned above, to relocate SR 2160.

